A B S T R A C T

A METHOD AND APPARATUS FOR DETECTING DEFECTS OF AT LEAST
ONE ROTOR OF A ROTARY WING AIRCRAFT

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A method and apparatus for detecting the defects of
at least one rotor of a rotary wing aircraft, in
particular a helicopter, in order to adjust the rotor.
In the method, in a preliminary step, a reference

10 aircraft is used corresponding to a particular type of
aircraft and having a rotor (6, 10) without defect and
adjusted so that the level of vibration is at a minimum,
a series of measurements are taken on the aircraft (1),
and a neural network is deduced therefrom illustrating

15 the relationships between accelerations representative of
vibration, and defects, and adjustment parameters.
Thereafter, in a later step, for a particular aircraft
(1) of the same type, measurements are taken on the
particular aircraft (1) and on the basis of said

20 measurements and on the basis of the neural network, the
defects, if any, are detected and values for the
adjustment parameters are determined that will enable the
level of vibration of the aircraft (1) to be minimized,
which parameters are applied to the rotor (6, 10).

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